

Serial No. 09/655,367
HP Ref. 30990128-03
Docket No. 1509-127
Page 4

IN THE CLAIMS:

Please cancel claims 3, 4, 6, 7, and 9-12 without prejudice or disclaimer, amend claims 1, 2, 5, and 8 as indicated below, and add claim 13 as follows:

1. (Currently amended) A method of ~~permitting secure access~~ communication between a service external to a network firewall and a client internal to the firewall, comprising the steps of:

(a) effecting an HTTP ~~GET operation or equivalent thereof~~ request from the client to ~~establish a communications socket at the client for communicating data between the service, and the client~~ request being a request for data and including a request identifier;

(b) ~~closing~~ in response to said request for data, establishing at the existing service a communications socket and opening a new communications socket at the client for communicating the requested data between the service and the client by performing another GET operation or equivalent thereof after a predetermined time interval and recording an association between the request identifier and the socket; and

(c) after a predetermined time interval, effecting a further HTTP request from the client to the service, said further HTTP request including said request identifier;

Serial No. 09/655,367
HP Ref. 30990128-03
Docket No. 1509-127
Page 5

(d) in response to said further HTTP request, closing the communications socket indicated in the association at the service, opening a new communications socket at the service for communicating data between the service and the client, and updating the association to associate the new communications socket with the request identifier; and

(e) repeating steps (c) and (d) until the request for data has been satisfied, the service and providing the requested data to the client via the communications socket currently associated with the request identifier by the association.

2. (Currently amended) The method of claim 1, wherein the predetermined time interval is set with reference to a specific time interval after which ~~software~~ a proxy server on the client side of the firewall ~~enforces~~ is arranged to enforce termination of a client communications socket ~~established by said GET operation or equivalent thereof~~ through which the service communicates with the client, said predetermined time interval being set to be less than said specific time interval.

3. (Cancelled)

4. (Cancelled)

Serial No. 09/655,367

HP Ref. 30990128-03

Docket No. 1509-127

Page 6

5. (Currently amended) The method of claim ~~[[4]]~~ 1, wherein the ~~globally unique identification is communicated via an HTTP requests are GET or POST operation or equivalent thereof~~ operations.

6. (Cancelled)

7. (Cancelled)

8. (Currently amended) Apparatus for ~~permitting secure access through a network firewall~~ communicating with a service via a proxy server arranged to force, after a specific time interval, termination of a communications socket through which communication between the apparatus and the service takes place, said apparatus comprising:

a communications interface for interfacing the apparatus with ~~[[said]] a network, the communications interface being arranged to open and close communications sockets;~~

a first control arrangement for using the communications interface to effect a first HTTP GET operation ~~or equivalent thereof in~~ with respect ~~[[of]]~~ to said service, thereby to cause the latter to establish a communications socket for communicating data between the service and the client, said GET operation being arranged to pass a globally unique identifier to the service;

Serial No. 09/655,367
HP Ref. 30990128-03
Docket No. 1509-127
Page 7

a second control arrangement for using the communications interface to repeatedly effect another GET operation ~~or equivalent thereof in respect of~~ sending said globally unique identifier to said service for a predetermined time interval, less than said specific time interval, after a most recent GET operation effected by the apparatus ~~[[in]]~~ with respect ~~[[of]]~~ to said service, thereby to cause the service to close ~~[[the]]~~ said existing ~~[[said]]~~ communications socket and to open a new communications socket for communicating data between said service and the client; and

a third control arrangement for causing the second control arrangement to terminate its operation when access between the service and the client is no longer required.

9-12. (Cancelled)

13. (New) A server comprising:

a communications interface for receiving HTTP requests from a client;

a first control arrangement arranged to identify HTTP requests of a first type and of a second type where each of these request types includes a globally-unique identifier and each request of said first type is a request for data;

Serial No. 09/655,367
HP Ref. 30990128-03
Docket No. 1509-127
Page 8

a second control arrangement arranged to respond to an HTTP request of said first type by establishing a communications socket at the server for communicating the requested data between the server and the client, and by recording an association between the identifier included in the HTTP request and the communications socket;

a third control arrangement arranged to respond to an HTTP request of said second type to close the communications socket indicated by the said association recorded in respect of the identifier included in the HTTP request, the third control arrangement being further arranged to open a new communications socket at the server for communicating data between the server and the client, and to update said association to associate said identifier with the new communications socket; and

a fourth control arrangement arranged to respond to the request for data included in an HTTP request of said first type by providing the requested data to the client via the communications socket currently associated with the identifier in the HTTP request by the corresponding said association.